

## PATENT ABSTRACTS OF JAPAN

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## (54) FINE CARBON FIBER AND METHOD FOR PRODUCING THE SAME

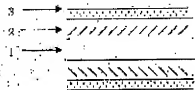
## (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a fine carbon fiber improving, e.g. occlusion of gas such as hydrogen, and in addition, effective as a filler for improving electroconductivity, thermal conductivity and mechanical strength when added to an electrode of an electric cell.

**SOLUTION:** The carbon fiber produced by gas phase method has 2-500 nm outer diameter, 10-15,000 aspect ratio and a multilayered structure having a hollow structure at the inner part, wherein a fine carbon fiber having a carbon structure the center part of which is different from that of the peripheral part can be provided, and in addition, a gas-occluding, electroconductive and thermo conductive filler can be obtained, which filler can improve, e.g. occlusion of gas such as hydrogen and, when the filler is added to an electrode, can obtain effectiveness as a filler for improving electronductivity, thermo conductivity and mechanical strength.

【図2A】

(A) 中心部：ヘリコーン型



【図2B】

(B) 中心部：繊維部に相当

